# L 3 Rec'd PCT/PTO 22 MAY 2005

#### Based on PTO-1390 (Rev. 05-2006) Approved for use through 3/31/2007. U.S. Patent and Trademark Office; DEPARTMENT OF COMMERCE TRANSMITTAL LETTER TO THE UNITED STATES ATTORNEY DOCKET NUMBER P03096US2A-(BJ001d) DESIGNATED/ELECTED OFFICE (DO/EO/US) U.S. APPLICATION NO! (If known, see 3 WC.F.R) CONCERNING A SUBMISSION UNDER 35 U.S.C. § 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/US2005/038017 20 October 2005 26 October 2004 TITLE OF INVENTION FUNCTIONALIZED POLYMER WITH LINKING GROUP APPLICANT(S) FOR DO/EO/US YUAN-YONG YAN & DAVID F. LAWSON Applicants herewith submit to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. § 371. 2. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. § 371. 3. This is an express request to begin national examination procedures (35 U.S.C. § 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). 5. Xi A copy of the International Application as filed (35 U.S.C. § 371(c)(2)) is included herewith (required only if not communicated by the International Bureau). b. has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. An English language translation of the International Application as filed (35 U.S.C. § 371(c)(2)) a. is included herewith. b. has been previously submitted under 35 U.S.C. § 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. § 371(c)(3)) are included herewith (required only if not communicated by the International Bureau). b. have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. d. 🗇 have not been made and will not be made. 8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. § 371(c)(3)). 9. 🛛 An oath or declaration of the inventor(s) (35 U.S.C. § 371(c)(4)). 10. 🔲 An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. § 371(c)(5)). Items 11 to 20 below concern document(s) or information included: 11. 🔲 An Information Disclosure Statement (see 37 C.F.R. §§ 1.97 and 1.98). 12. 🔲 An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. §§ 3.28 and 3.31 is included.

13. A preliminary amendment.

14. An Application Data Sheet (see 37 C.F.R. § 1.76).

15. A substitute specification.

16. A power of attorney and/or change of address letter.

17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 C.F.R. §§ 1.821 - 1.825.

18. A second copy of the published International Application under 35 U.S.C. § 154(d)(4).

19. A second copy of the English language translation of the International Application under 35 U.S.C. § 154(d)(4).

20. 
Other items or information: return receipt postcard, PTO-2038 (authorization to charge \$900.00)

### **Certificate of Express Mailing**

Under 37 C.F.R. § 1.10, I certify that all documents referenced herein are being deposited, on the date indicated below, with the United States Postal Service "Express Mail Post Office to Addressee" service addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Express Mail Mailing Label No.	Signature of Person Making Certification
EQ 556744989 US	Pavid G. Bullson
Date of Deposit	Printed Name of Person Making Certification
22 May 2006	David G. Burleson

The following fees are submitted  21.   Basic national fee (37 C.F.R. § 1.492(a))  22.   Examination fee (37 C.F.R. § 1.492(a))  WO prepared by ISA/US or IPER prepared by IPEA/US and indicates all claims satisfy provisions of PCT Article 33(1)-(4)  23.   Search fee (37 C.F.R. § 1.492(b))  WO prepared by ISA/US or IPER prepared by IPEA/US and indicates all claims satisfy provisions of PCT Article 33(1)-(4)  Search fee (37 C.F.R. § 1.492(b))  WO prepared by ISA/US or IPER prepared by IPEA/US and indicates all claims satisfy provisions of PCT Article 33(1)-(4)  Search fee (37 C.F.R. § 1.445(A)(2) on IA paid to USPTO as ISA \$100.00 \$400.00  ISR prepared by other ISA but provided or communicated previously to USPTO \$400.00  All other situations  TOTAL OF 21, 22, and 23 = \$900.00  TOTAL OF 21, 22, and 23 = \$900.00  Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. (37 C.F.R. § 1.492(b))  Total Sheets Extra sheets Number of each additional 50 or fraction thereof (round up to a whole number)  Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration later than the date of commencement of the national stage (37 C.F.R. § 1.492(b)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE  Total claims 5-20 = 0 × \$60.00 \$0.00	
21. Sexamination fee (37 C.F.R. § 1.492(a))  22. Examination fee (37 C.F.R. § 1.492(c))    WO prepared by ISA/US or IPER prepared by IPEA/US and indicates all claims satisfy provisions of PCT Article 33(1)-{(4)}  23. Search fee (37 C.F.R. § 1.492(b))    WO prepared by ISA/US or IPER prepared by IPEA/US and indicates all claims satisfy provisions of PCT Article 33(1)-{(4)}    Search fee (37 C.F.R. § 1.495(A)(2) on IA paid to USPTO as ISA \$100.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$500.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$1SR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$	only
W0 prepared by ISA/US or IPER prepared by IPEA/US and indicates all claims satisfy provisions of PCT Article 33(1)-(4)  23.   Search fee (37 C.F.R. § 1.492(b))     W0 prepared by ISA/US or IPER prepared by IPEA/US and indicates all claims satisfy provisions of PCT Article 33(1)-(4)     Search fee (37 C.F.R. § 1.492(A)/2) on IA paid to USPTO as ISA \$100.00     Search fee (37 C.F.R. § 1.445(A)/2) on IA paid to USPTO as ISA \$100.00     ISR prepared by other ISA but provided or communicated previously to USPTO \$400.00     All other situations   \$500.00     TOTAL OF 21, 22, and 23 =   \$900.00     Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. (37 C.F.R. § 1.492(j))     Total Sheets   Extra sheets   Number of each additional 50 or fraction thereof (round up to a whole number)   RATE     31 - 100 = 0 / 50 = 0	
wo prepared by ISANUS or IPER prepared by IPEA/US and indicates all claims setisfy provisions of PCT Article 33(1)-(4)  23. Search fee (37 C.F.R. § 1.492(b))  WO prepared by ISANUS or IPER prepared by IPEA/US and indicates all claims setisfy provisions of PCT Article 33(1)-(4)  Search fee (37 C.F.R. § 1.445(A)(2) on IA paid to USPTO as ISA \$100.00 \$400.00  ISR prepared by other ISA but provided or communicated previously to USPTO \$400.00  All other situations \$500.00  TOTAL OF 21, 22, and 23 = \$900.00  Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. (37 C.F.R. § 1.492(j))  Total Sheets Extra sheets Number of each additional 50 or fraction thereof. (round up to a whole number)  31 - 100 = 0 / 50 = 0	
WO prepared by ISA/US or IPER prepared by IPEA/US and indicates all claims satisfy provisions of PCT Article 33(1)-(4)   Search fee (37 C.F.R. § 1.445(A)(2) on IA paid to USPTO as ISA \$100.00 \$ 400.00     ISR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$ 500.00     All other situations \$500.00     Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. (37 C.F.R. § 1.492(ji))    Total Sheets   Extra sheets   Number of each additional 50 or fraction thereof (round up to a whole number)     31 - 100 = 0 / 50 = 0	
satisfy provisions of PCT Article 33(1)-(4)  Search fee (37 C.F.R. § 1.445(A)(2) on IA paid to USPTO as ISA \$100.00 \$  ISR prepared by other ISA but provided or communicated previously to USPTO \$400.00 \$  TOTAL OF 21, 22, and 23 = \$  Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. (37 C.F.R. § 1.492(j))  Total Sheets Extra sheets Number of each additional 50 or fraction thereof (round up to a whole number)  31 - 100 = 0 / 50 = 0	
SR prepared by other ISA but provided or communicated previously to USPTO \$400.00	
TOTAL OF 21, 22, and 23 = \$900.00  Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. (37 C.F.R. § 1.492(j))  Total Sheets Extra sheets Number of each additional 50 or fraction thereof (round up to a whole number)  31 - 100 = 0 / 50 = 0 ×\$250.00 \$ 0.00  Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration later than the date of commencement of the national stage (37 C.F.R. § 1.492(h)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE	
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. (37 C.F.R. § 1.492(j))  Total Sheets	
listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. (37 C.F.R. § 1.492(j))  Total Sheets Extra sheets Number of each additional 50 or fraction thereof (round up to a whole number)  31 - 100 = 0 / 50 = 0 × \$250.00 \$ 0.00  Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration later than the date of commencement of the national stage (37 C.F.R. § 1.492(h)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE	
additional 50 sheets of paper or fraction thereof. (37 C.F.R. § 1.492(j))  Total Sheets  Extra sheets  Number of each additional 50 or fraction thereof (round up to a whole number)  RATE  31 - 100 = 0 / 50 = 0 × \$250.00 \$ 0.00  Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration later than the date of commencement of the national stage (37 C.F.R. § 1.492(h)).  CLAIMS  NUMBER FILED  NUMBER EXTRA  RATE	
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration later than the date of commencement of the national stage (37 C.F.R. § 1.492(h)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE	
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration later than the date of commencement of the national stage (37 C.F.R. § 1.492(h)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE	
later than the date of commencement of the national stage (37 C.F.R. § 1.492(h)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE	
Tablacine	
Total claims 5-20 = 0 ×\$50.00 \$ 0.00	
0.33	
Independent claims 2 - 3 = 0 × \$200.00 \$ 0.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) 0 × \$360.00 \$ 0.00	
TOTAL OF ABOVE CALCULATIONS = \$ 900.00	
Applicant claims small entity status. See 37 C.F.R. § 1.27. Fees above are reduced by 50%.	
SUBTOTAL = \$ 900.00	
Processing fee of \$130.00 for furnishing the English language translation later than 30 months from the earliest claimed priority date (37 C.F.R. § 1.492(f)).	
TOTAL NATIONAL FEE = \$ 900.00	
Fee for recording the enclosed assignment (37 C.F.R. § 1.21(h)). The assignment is accompanied by an appropriate cover sheet (37 C.F.R. §§ 3.28 and 3.31). \$40.00 per property.	
TOTAL FEES ENCLOSED = \$ 900.00	
Amount to be refunded XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Amount to be charged XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
a. A check in the amount of \$ to cover the above fees is enclosed.	
b. Please charge Deposit Account No. in the amount of \$ to cover the above fees.  A duplicate copy of this sheet is enclosed.	
c.   The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-0925 (Bridgestone). A duplicate copy of this sheet is enclosed.	)
d.   The fees are to be charged to a credit card. Credit card information provided on form PTO-2038.	
NOTE: Where an appropriate time limit under 37 C.F.R. § 1.495 has not been met, a petition to revive (37 C.F.R. § 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.	t be
SEND ALL CORRESPONDENCE TO:	
Chief Intellectual Property Counsel	
Bridgestone Americas Holding, Inc.  DAVID G. BURLESON	
1200 Firestone Parkway	_
Akron, Ohio 44317-0001 38,090	
phone: 330/379-6850 REGISTRATION NUMBER	_
fax: 330/379-4064  Based on FORM PTO-1390 (rev. 05-2006)	

ient ref.: P03096WO1A
Atty. ref.: BJ001c0oWOb

#### INTERNATIONAL BUREAU OF WIPO

Int'l Appl. No.: PCT/US2005/038017 Int'l Filing Date: 20 October 2005

Earliest Priority Date Claimed:

26 October 2004

Title of Invention:

FUNCTIONALIZED POLYMER WITH LINKING GROUP

First Named Applicant:

**BRIDGESTONE CORPORATION** 

International Bureau of WIPO 34 chemin des Colombettes 1211 Geneva 20 SWITZERLAND

## INFORMAL COMMENTS ON THE WRITTEN OPINION OF THE ISA

The Written Opinion of the International Search Authority mailed 2 February 2006 has been received and considered. Applicants gratefully acknowledge industrial applicability of all original claims and novelty of original claims 18-19.

None of the cited references, alone or in combination, are believed to teach or suggest the present claims. In this regard, Applicants submit that

- > the teaching of D5 has been misunderstood or mischaracterized, specifically, neither the examples nor claims of D5 appear to teach that a polymer reacted with a polysiloxane can be further reacted with an additional functional group-forming compound; and
- > none of D1-D4 teach the use of a cyclic compound that includes at least one siloxane unit in its ring structure to provide a functionalized polymer that then can undergo additional functionalization.

Further, Applicants do not agree with the characterization of the problem to be solved; see, e.g., page 2, lines 1-9 of the specification as filed.

Finally, Applicants consider the items mentioned in Box VIII to be best handled during national phase proceedings.

Respectfully submitted,

1/avid G. Bulesor

19 April 2006

David G. Burleson Attorney for Applicants

Zollinger & Burleson Ltd. P.O. Box 2368 Canton, Ohio 44720-0368

phone: 330/526-0104, x2 facsimile: 866/311-9964